

WHAT IS CLAIMED IS:

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1 1. A telecommunications device, comprising:

2 an open loop power controller adapted to maintain a first phasing table and a
3 channel-temperature table;

4 a closed loop power controller adapted to maintain a second phasing table
5 and receive a power detector output;

6 wherein said open loop power controller is adapted to provide a power set
7 (APC) value in a first mode and said closed loop power controller is adapted to
8 provide said power set value in a second mode, and in said second mode, said
9 closed loop power controller receives said power detector output during a transmit
10 burst and after a transmit burst.

1 2. A telecommunications device in accordance with claim 1, said first
2 phasing table comprising pre-initialized power level and power set values.

1 3. A telecommunications device in accordance with claim 2, said second
2 phasing table comprising pre-initialized power detector and power level values.

1 4. A telecommunications device in accordance with claim 2, said channel
2 temperature table comprising a two-dimensional table of power set values with
3 temperature and channel.

1 5. A telecommunications method for controlling transmit power in a
2 wireless telecommunications device, comprising:
3 initializing first and second phasing tables, the first phasing table comprising
4 pre-initialized power level and power set values, said second phasing table
5 comprising pre-initialized power detector and power level values;
6 initializing a channel-temperature table, said channel temperature table
7 comprising a two-dimensional table of power set values with temperature and
8 channel;

9 generating a power set value using said first phasing table and said channel-
10 temperature table in an open loop mode; and
11 generating a power set value by reading a power detector and accessing said
12 second phasing table in a closed loop mode, wherein in said second mode said
13 power detector is read while a transmitter is on and while a transmitter is off.

1 6. A method in accordance with claim 5, said initializing a first phasing
2 table comprising adjusting the APC value until the nominal power for each power
3 level is output from the telecommunications device and storing that value is stored in
4 the first phasing table.

1 7. A method in accordance with claim 6, wherein said initializing said
2 channel-temperature table comprising setting a number of telecommunications
3 devices to a specific channel and temperature;
4 adjusting the APC values of the telecommunications devices until the
5 telecommunications devices output the nominal power for power level zero; and
6 averaging the results for each telecommunications device.

1 8. A method in accordance with claim 5, said generating a power set
2 value in an open loop mode comprising determining a nominal APC value for the
3 channel used to phase the telecommunications device by finding the closest higher
4 channel and closest lower channel in the table, and interpolating between the room
5 temperature APC values in the table.

1 9. A method in accordance with claim 5, said initializing said second
2 phasing table comprising adjusting the APC value until the nominal power for each
3 power level is output from the telecommunications device and storing the output of
4 the power detector in the table.

1 10. A method in accordance with claim 9, said generating a power set
2 value in a closed loop mode comprising:

- 3 reading the power detector to get an actual RF power value;
- 4 looking up the desired RF power value in the second phasing table;
- 5 obtaining an RF error; and
- 6 running a servo control loop calculation to find the APC value needed to
- 7 correct for the RF error.

1 11. A telecommunications method, comprising:
2 providing an open loop power controller adapted to maintain a first phasing
3 table and a channel-temperature table;
4 providing a closed loop power controller adapted to maintain a second
5 phasing table and receive a power detector output;
6 wherein said open loop power controller is adapted to provide a power set
7 (APC) value in a first mode and said closed loop power controller is adapted to
8 provide said power set value in a second mode, said closed loop power controller
9 receives said power detector output during a transmit burst and after a transmit
10 burst.

1 12. A telecommunications method in accordance with claim 11, said first
2 phasing table comprising pre-initialized power level and power set values.

1 13. A telecommunications method in accordance with claim 12, said
2 second phasing table comprising pre-initialized power detector and power level
3 values.

1 14. A telecommunications method in accordance with claim 12, said
2 channel temperature table comprising a two-dimensional table of power set values
3 with temperature and channel

1 15. A telecommunications device, comprising:
2 an open loop power controller adapted to provide a automatic power control
3 (APC) value in a low power mode;

15